

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003958**Date Inspected:** 20-Aug-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei, Wu Ming Kai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Bay 2; No contract welding being performed.

OBG Bay 3:

The QA Inspector randomly observed 2 ZPMC helpers utilizing angle grinders to blend the fillet welds attaching 20 mm I_Ribs to 6-Rib Side Plate SP404-001 (SP404A) Yellow Tag 351.

OBG Bay 4:

The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technician Bo Tin Rui, utilizing the Magnetic Particle Testing (MT) Method to perform 25% final MT verification of the fillet welds attaching 20 mm I-Ribs to End Plate EP97A/PL1571A, Yellow Tag 464. There appeared to be no indications and Mr. Bo accepted the welds on EP97A.

The QA Inspector randomly observed ZPMC NDT Technician Bo Tin Rui, utilizing the MT Method to perform 25% final MT verification of the fillet welds attaching 20 mm I-Ribs to End Plate EP108A/PL1580A, Yellow Tag 465. There appeared to be no indications and Mr. Bo accepted the welds on EP108A.

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The QA Inspector randomly observed ZPMC NDT Technician Bo Tin Rui, utilizing the MT Method to perform 100% MT verification of the 2F SMAW tack welds attaching the web plates to 33M Top(N) Tower Diaphragm SA276 and the 3F web to web tack welds between the top and bottom tower diaphragms. Mr. Bo marked up 5 areas that appeared to have linear indications. The welds involved were web to web 3G Weld Joint (WJ) Numbers NSD1-322A/B-13(1ea), NSD1-SA322A/B-17(1ea), NSD1-SA322A/B-15(2ea) and web to Top Diaphragm SA322 at WJ SSD1-SA322B/B-13(1ea). Mr. Bo marked up all 5 areas to be repaired and re-examined by MT. THE ATTACHED PHOTOGRAPH PROVIDES ADDITIONAL DETAIL.

The QA Inspector performed a random 10% MT verification of the fillet welds attaching 20 mm I-Ribs to End Plate EP97A/PL1571A, Yellow Tag 464. There appeared to be no indications and accepted the welds on EP97A.

The QA Inspector performed a random 10% MT verification of the fillet welds attaching 20 mm I-Ribs to End Plate EP108A/PL1580A, Yellow Tag 464. There appeared to be no indications and accepted the welds on EP108A.

OBG Bay 7:

The QA Inspector randomly observed ZPMC helper utilizing an angle grinder to blend areas that had been repaired on the fillet welds attaching stiffeners to Floor Beam Sub-Assembly FB034-001.

OBG Bay 8:

The QA Inspector randomly observed ZPMC welding personnel utilizing Carbon Air Arc Apparatus to remove run/on and run/off tabs from the top and bottom ends of weld joints between the sections of various Tower Diaphragm Flange Plate Assemblies.



Summary of Conversations:

As noted in the above body of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

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Inspected By:	Franco,Charlie	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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